Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	

COMMENTS ON FURTHER NOTICE OF PROPOSED RULEMAKING BY MAINE PUBLIC UTILITIES COMMISSION, MAINE OFFICE OF PUBLIC ADVOCATE, MONTANA PUBLIC SERVICE COMMISSION, VERMONT PUBLIC SERVICE BOARD, AND WEST VIRGINIA CONSUMER ADVOCATE DIVISION

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Joel Shifman
Senior Advisor
Maine Public Utilities Commission
242 State Street
Augusta, Maine 04333-0018
(207) 287-1381

William C. Black
Wayne R. Jortner
Maine Public Advocate
112 State House Station
Augusta, ME 04333-0112
(207) 287-2445

George Young, Esq.
Policy Director
Vermont Public Service Board
112 State Street
Montpelier, Vermont 05602
(802) 229-0130

Justin Kraske
Attorney
Montana Public Service Commission
1701 Prospect Avenue. PO Box 202601
Helena, Montana 59620-2601
(406) 444-6178

Patrick W. Pearlman
Deputy Consumer Advocate
Consumer Advocate Division of
the West Virginia Public Service Commission
700 Union Building
723 Kanawha Boulevard, East
Charleston, WV 25301
(304) 558-0526

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Summary

The Commission's tentative decision that it will not reform the non-rural high-cost mechanism at this time makes a sham out of its commitments in the Tenth Circuit mandamus proceeding and defies the clear direction of the Court in its remand order. The petitioning parties in the mandamus action relied on the Commission's commitment that it would release **a final order that responds to the Court's remand** no later than April 16, 2010 when they agreed to settle that litigation. Sadly, the Further Notice of Proposed Rulemaking ("FNPRM") represents yet another wearying delay in responding substantively to Tenth Circuit Court decisions dating all the way back to 2001. The action that the Commission needs to take in this case is not a diversion from the National Broadband Plan ("NBP") process. It is a necessary and critical component of developing and implementing the NBP consistent with Section 254 of the Act.

The decisions proposed in the FNPRM fail in several important ways to respond to the *Qwest II* remand. The Commission does not yet have proper findings or data to support its tentative legal conclusion that the program as currently structured is consistent with its statutory obligations under Section 254. The Court directed the Commission to perform two major tasks: 1) to reevaluate the mechanism using legal standards that correctly interpreted the Act (*e.g*. that it ***advance*** as well as preserve universal service) and support its conclusions with empirical evidence and 2) to provide more support if needed to bring rural/urban rate variances in line with an objectively-defensible reasonable comparability standard.

In the FNPRM, the Commission sets a course that simply continues the status quo and it does so without any necessary legal and evidentiary justification. It fails to provide data and

analysis showing that the current mechanism properly advances universal service. It bases its decision not to increase support on its desire not to increase the size of the Fund. The tentative decision is not data driven, but totally results-oriented.

To comply with the Tenth Circuit's order, the Commission should bifurcate this proceeding into two phases. In Phase I, on or before the April 16, 2010 deadline, the Commission should suspend or revise its comparability testing methodology, rerun the cost model with current switched line counts to determine cost based on updated data, and set the cost benchmark at 125% of the cost of service in Washington, DC (as a proxy for urban cost). These changes should trigger only modest increases to the $7 billion fund. In Phase II which would occur throughout the remainder of 2010 and thereafter, it should take other actions that require more study or more data collection than is possible before April 16. The Commission should take basic actions by its deadline that respond substantively to the Court's direction and refine its mechanism as it continues to gather data and implement its NBP. Any mechanism that the Commission adopts must be consistent with Section 254(b)(3) of the Act.

I. Introduction

The Maine Public Utilities Commission, the Maine Office of Public Advocate, Montana Public Service Commission, the Vermont Public Service Board, and West Virginia Consumer Advocate Division (together, "Rural States") respectfully submit these initial comments in response to the Commission's Further Notice of Proposed Rulemaking ("FNPRM"), FCC 09-112, released on December 15, 2009.

One year ago, Vermont/Maine, Qwest Corporation and the Wyoming Public Service Commission ("Petitioning Parties") filed a Petition for Writ of Mandamus in the Tenth Circuit Court of Appeals ("Tenth Circuit" or "Court"), showing that the Commission's then four year delay in complying with the Court's remand order and thirteen year delay in adopting a Section 254-compliant non-rural mechanism constituted an unlawful withholding and unreasonable delay of agency action. The Rural States relied on the Commission's commitment that it would "release a final order that responds to the Court's remand no later than April 16, 2010" [1] in agreeing to settle the mandamus litigation. At the same time, the Commission represented to the Petitioning Parties that it would "work collaboratively" to "address the issues presented by the Tenth Circuit remand."[2]

The Commission has made a sham out of these commitments and representations by tentatively concluding that it should not reform the non-rural high-cost mechanism at this time, by failing to support its conclusions with substantive analysis as directed by the Court, and by failing to commence the action that it now asserts cannot be done in a timely manner. The

[1] Response of the Federal Communications Commission to Petition for Writ of Mandamus, Case No. 0909502, March 6, 2009, p. 2. ("*FCC Court Response*").

[2] *See* Letter of P. Michelle Ellison, Acting General Counsel, FCC, March 6, 2009.

Commission claims that it will not have time between releasing the National Broadband Plan ("NBP") and April 2010 to implement high-cost reform.[3] However, the Commission cannot complete and implement its NBP without addressing the issues raised in this remand. This effort is not a diversion from the NBP but, rather, is a necessary and critical component of developing a plan that satisfies the Act.

Moreover, if the Commission has a timing issue, it is a problem of the Commission's own making. Some of the Rural States met with the Commission a year ago to discuss the work that needed to be done in response to the Court order, including setting a benchmark that objectively reflected reasonable comparability, fixing the model, and performing a data analysis to compare rural and urban costs. The Commission appeared to represent that it could do the work required within the agreed timeframe. Indeed, the Commission noted to the Court that these were the tasks that it needed to accomplish.[4]

The Rural States support encouraging broadband deployment throughout their underserved rural high-cost areas through universal service support. However, any non-rural mechanism that the Commission adopts must satisfy the Court's directives. The Commission's FNPRM fails to respond to the charge given to it in 2005 by the Tenth Circuit in *Qwest II*.[5]

The Commission does not yet have proper findings or data to support its tentative legal conclusion that "the program as currently structured is consistent with our statutory obligations

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[3] *Id.*

[4] *See* FCC Court Response p. 2. The FCC quoted the Court's statements that redefining statutory terms and developing a support mechanism consistent with Section 254(b) required the "full development of an administrative record, empirical findings and careful analysis."

[5] *Qwest Communications International, Inc. v. FCC,* 398 F.3d 1222 (10th Cir. 2005) ("*Qwest II*").

under section 254."[6] This tentative conclusion is therefore arbitrary and capricious. The Court directed the Commission to: 1) reevaluate the mechanism using legal standards that correctly interpreted the Act; 2) support the conclusions with empirical evidence; and 3) provide more support if needed to bring rural/urban rate variances in line with an objectively-defensible reasonable comparability standard.[7] In the FNPRM, the Commission appears destined to return to the Court once again empty-handed.

The Tenth Circuit rejected the current mechanism because the Commission measured it against legal standards and a reasonably comparability benchmark designed to justify existing funding levels. The Court directed the Commission to adopt a mechanism that advanced, not just preserved, universal service:

> The Commission's definition of 'reasonably comparable' rests on a faulty and indeed largely unsupported construction of the Act…Thus, the Commission erred in premising its consideration of the term 'preserve' on the disparity of rates existing in 1996 while ignoring its concurrent obligation to advance universal service, a concept that certainly would include a narrowing of the existing gap between rural and urban rates.[8]

The Court also instructed the Commission to develop a full administrative record supporting the mechanism it adopted including empirical findings and careful analysis.[9] The Commission, despite the Court's unambiguous order, has not provided any factual findings in support of the conclusion that the status quo is consistent with Section 254. The FNPRM does

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[6] FNPRM at ¶ 12.

[7] *Qwest II* at 1236-1238.

[8] *Id*. at 1235-36.

[9] *Id.* at 1239. The Tenth Circuit also reprimanded the Commission for its insufficient analysis in *Qwest I*, concluding that the Commission had failed to evaluate data comparing rural and urban costs under the proposed high-cost mechanism and also failed to justify the 135% benchmark figure. *See Qwest Corp. v. FCC*, 258 F.3d 1191, 1202 (10th Cir. 2001) ("*Qwest I*").

not provide any substantive analysis or objective data explaining whether the current system advances universal service and ensures rural and urban rates that are reasonably comparable.

During the first remand to the Commission, between *Qwest I* and *Qwest II,* the Commission made superficial modifications to its support mechanism and concocted a new rate reporting mechanism. This time around the Commission offers even less. It does not even bother to develop creative new mechanisms that might throw a reviewing court off the real issue. While the Commission's candor may be greater than that of its predecessors, the result still violates Section 254. Indeed, if the Commission takes all of the actions proposed in the FNPRM, and only those actions, the Commission may be in contempt of the Court's remand, in part because of the five-year delay and in part because the final order would so obviously fail to address the remanded substantive issues.

When the Tenth Circuit issued *Qwest II,* it denied a request from petitioners that it retain jurisdiction. In discussing that request in 2005, the Court observed that nearly nine years had already passed since enactment of Section 254, and almost four years had passed since the Court's first remand in *Qwest I.*[10] Although the Court rejected the parties' request that it retain jurisdiction over the case, the Court said that it "fully expect[ed] the FCC to comply with [its] decision in an expeditious manner, bearing in mind the consequences inherent in further delay."[11] There has been no such expeditious resolution. Another five years have now passed, but the Commission has not made any policy change or issued any final decision in response to the remand. Even worse, the Commission has now claimed that a proliferation of new issues justifies even more delay.

[10] *Id.*

[11] *Id*.

The Court's decision referred broadly to the "consequences" of further delay, but without explaining what those consequences might be.[12] There have indeed been consequences in Maine, Montana, and Vermont from the lack of sufficient federal support for non-rural incumbent local exchange carriers.[13] In Maine and Vermont, Verizon reduced its net investment, allowing its existing plant to age and become more highly depreciated, even as it made large capital investments elsewhere in wireless services and high-capacity fiber-based services offered in more urban states. Verizon was also slow to deploy advanced services and perform needed upgrades to systems to meet customer demand for services such as DSL.

In 2008, Verizon sold its Maine and Vermont operations to FairPoint. As with the former owner, Fairpoint's ability to provide advanced services and meet the service quality needs of its customers is directly related to receiving adequate universal service support. Service quality in Maine, Montana, and Vermont has suffered during the five years since the *Qwest II* decision and many customers have been denied the benefits of advanced services that are increasingly available in urban states with greater population densities and more profitable markets.[14] The

[12] *See Qwest II* at 1239 ("We fully expect the FCC to comply with our decision in an expeditious manner, bearing in mind the consequences inherent in further delay.")

[13] The Commission should not be misled by the term "non-rural." Not all non-rural carriers serve urban areas. In Maine, many of the most rural areas of the state are served by Maine's sole non-rural carrier. In fact, the "non-rural" territory in Maine contains more telephone customers that all the 22 rural telephone companies combined. Although non-rural companies are generally larger than rural companies, they serve some very high cost areas. In some states there high cost areas are so extensive that the non-rural carrier's average rates are high. Similarly, the Commission should keep in mind that many of these carriers still have Carrier of Last Resort obligations under state law.

[14] *See In the Matter of PSC Investigation of Qwest Corporation Regarding the Justness and Reasonableness of Rates, Schedules and Terms, and Conditions of Service*, Docket No. D2008.1.6, Order No. 6889n (Montana PSC Dec. 23, 2008) at ¶¶ 41-42; *In the Matter of PSC Investigation of Qwest Corporation Quality of Service*, Docket No. N.2008.12.144, Order No. 6994a (Montana PSC Oct. 8, 2009); *see also* Letter from Greg Jergeson, Chairman, Montana PSC, to Marlene H. Dortch, Secretary, FCC, and Karen M. Majcher, USAC (Sept. 22, 2009).

Rural States are weary of filing comment after comment in this proceeding. Companies in their jurisdictions are suffering severe losses and going bankrupt and the Commission is not taking any action to address the situation.

To comply with the Tenth Circuit's order, the Commission should bifurcate this proceeding. This will allow the Commission to follow the Court order in the agreed-upon timeframe and continue to carry out its statutory duty to support voice service as one of the basic "universal services."

In Phase I, on or before the April 16, 2010 deadline, the Commission should take action to suspend or revise its comparability testing methodology, set a cost benchmark that objectively makes common sense such as 125%, apply it to the measured cost of service in Washington, D.C. as a proxy for urban rates and rerun its cost model with current switched line counts. These Phase I changes should trigger only modest increases in the $7 billion Fund. In Phase II, which would occur throughout the remainder of 2010 and thereafter, the Commission should take other actions that require more study or that require more data collection than is possible before April 16.

II. Phase I: By April 16, 2010, the Commission should suspend or substantially modify its current rate comparability testing methodology.

The Commission's current reporting methodology requires states to report and evaluate current local rate data. States and the Commission use this data to determine whether local rates are reasonably comparable in light of the requirements of Section 254. The Rural States see nothing wrong in principle with such an after-the-fact mechanism that measures actual results, as opposed to predicted behavior. Such a mechanism can provide a useful check on whether support is sufficient and whether the Commission adequately understands the local exchange

financial environment. An after-the-fact check cannot substitute for a support mechanism or bring an insufficient support mechanism into compliance with law. In *Qwest II*, the Court assumed the Commission would add whatever support was needed to bring rate variances in line with a benchmark that objectively reflected reasonable comparability.

Any after-the-fact measurement system must be comprehensive, valid, and reliable, and it must have meaningful consequences. The current comparability mechanism is so deeply flawed that it meets none of these standards. Nevertheless, the Commission has an opportunity to develop a new and much better system for an after-the-fact measurement system.

A. The current mechanism is not sufficiently comprehensive because it does not measure service availability or quality nor the rates for non dial-tone services.

Section 254(b)(3) of the Act requires that support be sufficient not only to make rates reasonably comparable, but also to make services reasonably comparable. If the Commission wants to rely on state commission reporting as the basis for complying with its statutory mandate, it must enlarge the number of variables reported to include service availability and service quality.

The goal of reasonable comparability applies to "advanced services" as well. The FNPRM notes that the statute establishes the goal that customers should have access to advanced services and "interexchange services" at reasonably comparable rural and urban rates.[15] The Commission's current reporting mechanism does not make any effort to ascertain the availability, much less the price, of these advanced services. The Commission should measure

[15] FNPRM at ¶ 18.

the comparability of non-dial tone rates (*e.g.*, special access) and those bundled service rates that include advanced services, because that is part of the commitment of Section 254.

Service availability is a very real concern in Maine, Montana, Vermont, and West Virginia both for residential customers and economic development. One of the essential functions of telecommunications services is to extend economic opportunity to rural citizens. Without a full range of high-capacity services, residents of rural areas of these states cannot hope for the jobs and economic productivity comparable to what is available to citizens of more urban states.

Service comparability is also important for other high-capacity telecommunications services offered to business customers. Before Verizon sold its Maine network to FairPoint, Verizon offered several high-capacity services in southern New England that it did not offer in Maine. The absence of these services is a barrier to economic development in Maine.

Service quality measurements are even more important because of two Commission policies applicable to larger non-rural incumbents that create incentives to reduce service availability and compromise on quality. First, the Commission's price cap policy sets rates without regard to net investment or actual operating expense. This permits incumbents to increase their profits by decreasing net investment and by decreasing expense.

Second, the Commission's decision to use forward-looking costs to calculate high-cost support creates similar incentives. Support is determined by the costs of building and operating a virtual network. The models do not accept any inputs based on actual investment. Therefore, a carrier that invests gets the same support as a carrier that does not. Adequate investment and operating expense is simply assumed.

The 1997 Commission thought that these universal service incentives were beneficial, creating incentives for efficiency.[16] The incentives have no doubt had some salutary effects, such as creating efficiencies in corporate overhead. Yet they also created perverse incentives to reduce net investment and expense, even for facilities and staff that are necessary for quality service. In Vermont, there have been problems with old distribution lines, inadequate tree trimming, and double poling.[17]

The Commission has been solidly committed to using price caps to set interstate rates and to using forward-looking costs to allocate support to non-rural carriers. It should also recognize that those decisions have side effects on service quality. The Commission should at least measure the magnitude of those side effects to determine where they are violating the comparability principles of Section 254.

The FNPRM recognizes some of the above problems with the current certification process. The recitation of complex issues, however, cannot justify still more delay, particularly if those issues have previously been subject to notice and comment but remain unresolved. Apparently the Commission has not made any substantial progress on these many issues in the five years since the *Qwest II*. While old issues have lingered, new issues have emerged.

[16] *See Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, First Report and Order, 12 FCC Rcd. 8776 (1997) ("*USF First Report and Order*") at ¶ 225.

[17] Double poling refers to the increasingly frequent practice of large telephone companies to leave two poles in place at one location. Customarily, the telephone company carries its facilities lowest on any pole, and is accordingly the last to move its facilities to a new pole. Customarily, the last utility to work on a pole relocation removes the old pole. Verizon Vermont, however, allowed thousands of old poles to remain in place, creating an eyesore.

B. The current rate certification process has deficiencies that make conclusions about comparability invalid.

The FNPRM discusses several deficiencies in the current rate certification process. Many of these issues have been the subject of previous notice and comment at the Commission. The resolution of each significantly effects the validity of rate comparisons:

- The Commission has noted in the past that the size of the local calling area is an important variable[18] and that "calling scope" can affect the value of service. The Commission sought comment on that issue in 2003.[19] The Rural States and others have repeatedly emphasized the importance of this variable. Yet the Commission has never explained how a reporting state should adjust its rate data certifications for calling area size. The FNPRM seeks comment once again on this perennial issue, without proposing a particular solution and without having made any evident progress.

- The FNPRM mentions that some states allow carriers to charge higher rates for business customers.[20] The Commission sought comment on this same issue in 2003 when it asked whether states should be required to file data related to business rates.[21] The Commission never acted on those comments.

- The Commission has noted in the past that "most consumers no longer purchase stand-alone local telephone service, but instead purchase bundles of

[18] FNPRM at ¶ 18.

[19] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order on Remand, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order, 18 FCC Rcd. 22,559 ("*Qwest I Remand Order*") at ¶ 113.

[20] FNPRM at ¶ 22.

[21] *Qwest I Remand Order* at ¶ 110.

telecommunications services from one or more providers."[22] The problem is particularly difficult due to the proliferation of bundled service packages and the detariffing or deregulation of many of those bundles. Yet the Commission has never explained how states should adjust their comparability reports to reflect this increasingly common purchasing pattern. The FNPRM seeks comment once again on this perennial issue, without proposing a solution.[23]

- The FNPRM notes that many customers today purchase services from competitive ("alternative") providers. The FNPRM seeks comment on this issue, without proposing a solution.[24]

Normalizing rates to account for these and other variables that affect rate levels is very difficult. That is why the Commission used cost in the first place to enable reliable "apples to apples" comparisons.

C. The current comparability methodology relies on a rate benchmark that has already been declared invalid and that the Commission has never tied to the statute.

The Commission established the current comparability benchmark in response to *Qwest I*. A rural rate is considered reasonably comparable to urban if it is less than two standard deviations above the urban average rate.

Qwest II has already criticized that choice, saying that it "ensure[s] that significant variance between rural and urban rates will continue unabated."[25] The Court commented on the

[22] FNPRM at ¶ 16.

[23] FNPRM at ¶ 17, 19.

[24] FNPRM at ¶ 19.

[25] *Qwest II* at 1236.

unacceptable disparity between the benchmark and the average urban rate and said that if rural rates allowed under the benchmark were compared against the national urban average, it "fail[ed] to see how they could be deemed reasonably comparable."[26] In addition:

> By designating a comparability benchmark at the national urban average plus two standard deviations, the FCC has ensured that significant variations between rural and urban rates will continue unabated ….The Commission's selection of a comparability benchmark based on two standard deviations appears no less arbitrary than its prior selection of a 135% benchmark … On remand, the FCC must define the term 'reasonably comparable' in a manner that comports with its concurrent duties to preserve and advance universal service.[27]

The Court in *Qwest II* found that the Commission had erred in interpreting Section 254. The current rate benchmark was conceived in the mistaken belief that the Commission's duty was limited to "preserving" rate differences as they existed in 1996. The Court rejected that argument, directing the Commission to "define the term 'reasonably comparable' in a manner that comports with its concurrent duties to preserve *and advance* universal service."[28]

Oral argument in *Qwest II* provided enlightenment about how the presiding judge viewed the matter. Judge Kelly asked the Commission's legal counsel questions about when the price of two suits would be reasonably comparable. The questions suggested that the judge had in mind a practical standard, that two prices are reasonably comparable only if a buyer wouldn't accept some added inconvenience to get the cheaper price.

Despite this history, the Commission tentatively concludes in the FNPRM that it should readopt the reasonable comparability definition that the Court has already found to be illogical and in violation of common sense. The FNPRM does not explain how a standard that was

[26] *Id.* at 1237.

[27] *Id.* at 1236-1237 (citations omitted).

[28] *Id*. (emphasis added).

created using an erroneous statutory construction can now comply with that same statute. The FNPRM does not even attempt to justify the current rate comparability benchmark under Section 254.

Rather, the FNPRM's discussion of comparability is limited to peripheral issues. The FNPRM asks whether increasing telephone penetration rates should be considered evidence of comparable rates.[29] The FNPRM establishes and then knocks down a straw man, asking whether it makes sense to require that "all rural rates be no higher than the lowest urban rate." [30] So far as the Rural States are aware, no party has ever suggested such a revolutionary policy. Finally, the Commission offers the novel proposition that the statute does not require it to "advance" voice service if it "extends universal service to new services and new technologies, such as broadband Internet access service."[31] This suggestion ignores the specific language of Section 254(b) that requires comparability of services.

While theoretically interesting, these points are diversions from the principal issue, which is whether the existing comparability standard (which uses a rate benchmark of two standard deviations above the urban average rate) is in compliance with law. The FNPRM simply does not address that issue, which *Qwest II* remanded to the Commission. Instead, the FNPRM broadly seeks comment on how the Commission "should respond to the Tenth Circuit's concerns."[32] The Rural States are disappointed that the FNPRM seemingly illustrates a lack of substantive progress on the fundamental task of measuring compliance with Section 254 during the five years that have followed *Qwest II*.

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[29] FNPRM at ¶ 32.

[30] *Id*. at ¶ 40.

[31] *Id*. at ¶ 41.

[32] *Id*. at ¶ 40.

D. The comparability rate benchmark has design flaws that make it unable to judge consistently whether rates are reasonably comparable.

The current accountability mechanism is almost meaningless because its internal design makes the standard inherently self-forgiving. For mathematical reasons, the standard adjusts itself to overlook nearly all cases of non-comparable rates.

The current comparability rate benchmark is set at two standard deviations above the average urban rate. The first problem is that this is a self-forgiving standard. In most statistical distributions involving a large number of cases, the great majority of those cases are found at or below the point that is two standard deviations above the mean. For example, in the "normal" distribution that is studied by high school and college statistics students, 97.7% of the cases satisfy the test of being less than the point two standard deviations above the mean. While the actual distribution of rates does not precisely follow the normal distribution, the overall point still applies. Any comparability standard that is pegged at two standard deviations above the average is likely to conclude that the overwhelming majority of rates are comparable.

The Commission's current comparability yardstick therefore drains nearly all objective meaning from the statutory goal of "reasonably comparable rates." Because the standard based on urban rates is set so high, rural rates are very unlikely to exceed "reasonable comparability."

The comparability standard can also shift over time. In any distribution of data, the standard deviation increases when the data points spread out and become more dissimilar over time. In this case, if some low urban rates were to decline or some high urban rates were to increase, the standard deviation of the rate distribution would increase, and the benchmark would increase by twice the amount of the change in standard deviation. As a result, a given rural rate could very well be found non-comparable in one year and comparable in the next year.

Until recently, the Joint Board's Monitoring Report reported on the rate benchmarks used in different years. The results are summarized in the following table.

Year (October 15)	Average charge	Standard Deviation	Benchmark	Benchmark / Average
2000[33]	$20.78	$3.57	$27.92	134%
2005[34]	$24.74	$4.92	$34.58	140%
2007[35]	$25.62	$5.45	$36.52	143%

The table shows that during the period from 2000 to 2007, the comparability benchmark rose considerably, allowing ever higher rural rates to qualify as "comparable." Inflation was likely one cause of that rising benchmark. Yet the final column of the table shows that there was an additional cause. The comparability yardstick stretched from 134% of the average rate to 143% of the average rate. This proves that the comparability yardstick, over time, has stretched itself to tolerate higher and higher rural rates as "reasonably comparable to urban."

These problems with the current methodology are too fundamental to be tolerable. A standard cannot be in compliance with law if, by design, it blinds itself to evidence that the real world situation is becoming worse and statutory goals are actually receding into the distance. No court could reasonably find that such a formula is consistent with the intent of Congress when it enacted Section 254.

E. Even when states certify that rates are not comparable, there are no consequences.

State commissions annually certify to the Commission whether rates are reasonably comparable in rural areas. The Commission created this mechanism after *Qwest I,* and it relied

[33] Federal-State Joint Board 2004 Monitoring Report, Table 7.10.

[34] Federal-State Joint Board 2006 Monitoring Report, Table 7.9.

[35] Federal-State Joint Board 2008 Monitoring Report, Table 7.9. The 2009 Monitoring Report no longer reports this data.

on that mechanism during the *Qwest II* review. The Commission said in 2003 that it would use this new rate data "in its review of the reasonable comparability of rural and urban rates nationwide."[36] The Commission has never shown that it actually conducts such reviews. Certainly there have been no public notices, nor are the Rural States aware of any communications with the Federal-State Joint Board on Universal Service in this regard.

On the contrary, from all outward appearances, when a state certifies non-comparability, *nothing happens*. The Vermont Public Service Board and the Wyoming Public Service Commission have repeatedly certified that rural rates in those states are not comparable. Yet the Commission has not taken any action in response. There has been no investigation or even a letter of inquiry from the Commission.

More than five years ago, Wyoming officials submitted a petition seeking supplemental federal universal service support for customers of Wyoming's non-rural incumbent carrier. The petition followed the procedure the Commission adopted in its October 27, 2004, remand order that had been issued in response to *Qwest I*. Wyoming alleged that rates were not reasonably comparable, and that it needed more support to make them comparable. Other than issue a public notice seeking comment, the Commission never took any action on this Petition.[37]

Given this record of inaction, the Commission's rate reporting mechanism appears to have no real substantive purpose. Rather, the rate reporting mechanism seems to consist entirely

[36] *Qwest I Remand Order* at ¶109.

[37] The petition was filed on December 21, 2004, by the Wyoming Public Service Commission and Wyoming Office of Consumer Advocate. They filed a Joint Petition for Supplemental Universal Service Funds for Wyoming's Non-Rural Incumbent Local Exchange Carrier pursuant to the FCC's October 27, 2003, Order on Remand, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order (the Order on Remand) in CC Docket No. 96-45, FCC 03-249. The FCC issued a Public Notice, DA 05-412, on February 14, 2005, requesting comments by March 7, 2005, and reply comments by March 21, 2005.

of a reporting burden that is placed on the states without any corresponding benefit. There is no evidence that the Commission actually conducts a "review of the reasonable comparability of rural and urban rates nationwide," as it promised. On the contrary, the Commission appears to routinely disregard evidence of non-comparable rates that has been regularly submitted by two states. With this history, it is difficult to see how the current reporting mechanism demonstrates anything about the Commission's compliance with the goals of Section 254 or the Tenth Circuit's two remand orders. The Commission has failed to explain how these certification procedures will ensure reasonably comparable rates.

F. Conclusion

The current mechanism for measuring rate comparability has serious deficiencies. Some of these have been repeatedly noted by the Commission in prior years and once again in the FNPRM. Any conclusions based on the current rate data would be meaningless, possibly even misleading. Indeed, an incomplete, invalid, and unreliable mechanism could do more harm than good. The Commission seems no closer to solving these problems than it was in 2005, perhaps less so. The comparability mechanism has not produced any program results and seems primarily designed to persuade reviewing courts that the Commission's support mechanisms should be affirmed. The Commission should therefore acknowledge that its current methodology does not evaluate whether carriers are meeting the goals of Section 254.

One option is to suspend the current rate reporting mechanism until it can be redesigned. While this choice may be reasonable under the circumstances, it must be emphasized that such action does not allow the Commission to bypass the questions relating to sufficiency of support that are discussed in part III below. The Commission cannot use an ever-expanding list of measurement issues to delay providing sufficient support to non-rural carriers serving rural areas.

The second option is to redesign the mechanism. To make the mechanism comprehensive, valid, and reliable, the Commission should:

1. Address comprehensiveness by also measuring the availability of advanced services and service quality.
2. Address validity by resolving how reporting states should adjust for local calling scope, the business/residential differential, bundled services, and services purchased from competitive carriers.
3. Numerically tie the comparability benchmark to the Act. We recommend setting the comparability benchmark at 125% of the average urban rate. This change would eliminate the current design flaw that makes the current benchmark self-forgiving and capable of stretching over time.

A redesigned mechanism should also include a series of remedies when rates are not comparable. It is not enough to assume that non-comparable rates somehow arise from state failures, something suggested in earlier Commission orders. Rather, where a state has high rates and mostly rural subscribers, there is only one way for it to have lower rates on average: increased federal support. To ensure that the Commission takes an appropriate share of responsibility for future failures to reach Section 254 goals, the Commission should adopt a rule that requires a Commission decision within one year following any certification by a state that rural rates are not comparable and following the filing of any petition similar to the Wyoming petition from 2004.

III. Phase I: By April 16, 2010, the Commission should take immediate action to reduce the cost benchmark so that high-cost areas receive sufficient support.

The Commission should take immediate action, within the time periods contained in the Mandamus Stipulation, to reduce the cost benchmark and increase support to non-rural carriers. It should do so for the reasons outlined below.

A. Competition makes sufficient support more important now than ever before.

The Commission has often remarked that universal service support was based on many kinds of implicit subsidies. Foremost among these has been the support that flows from urban areas to rural areas. Another important support flow is from business customers to residential customers.

These two implicit support flows are sizeable, but they are eroding rapidly and placing the survival of incumbent carriers in jeopardy. In states that have both competitive low-cost areas and uncompetitive high-cost areas, those traditional support flows can no longer be taken for granted. As competitors take the highest profit business customers and downtown residential customers, the incumbent's average cost to serve its remaining customers increases, and thus the incumbent's need for support increases. The movement of many customers to wireless-only services, although less geographically concentrated, has produced similar effects.

In the past, high-cost support was seen by many observers as non-essential, possibly even unnecessary. As the traditional support mechanisms erode, making the support flows explicit becomes a necessary condition for the survival of wireline networks in rural areas. It can literally mean the difference between continued service and bankruptcy.

B. Comprehensive reform cannot justify further delay in providing substantive relief.

The *Qwest II* court evaluated a support mechanism that relied on a cost benchmark that had been set at two standard deviations above the mean state-averaged forward-looking cost of providing service. The Court directed the Commission to provide a better explanation of that benchmark.

The FNPRM explains that the Commission is reluctant to do anything at this time that "would increase significantly the amount of support non-rural carriers would receive."[38] On that basis, the FNPRM rejects the proposal from the Vermont and Maine commissions that the benchmark be set at no more than 125% of urban average cost.[39] The Commission lists only two reasons for this decision. Neither is valid under the law or *Qwest II*.

The Commission's first basis for failing to act on the cost benchmark is that providing more support to non-rural carriers would interfere with plans for comprehensive reform. The Commission states that it has "insufficient time" to meet its stipulated commitment to an order in this matter by April 16, 2010, because it plans to issue the NBP in February.[40]

The Rural States commend the Commission for its current efforts to modernize its cost model and to undertake serious comprehensive reform of the high-cost support system. Nevertheless, the Commission is in violation of the stipulation that it made with the Rural States and in the pending Tenth Circuit mandamus action. The mere possibility of a "comprehensive reform" cannot stand in the way of complying with a five-year old court order. While the NBP

[38] FNPRM at ¶¶ 13, 25.

[39] *Id*. at ¶ 25.

[40] *Id*. at ¶ 12.

is understandably a major focus of Commission activity, the Commission has not explained why it cannot reduce the current cost benchmark and simultaneously prepare for comprehensive reform.

Moreover, there is no commitment to deliver this comprehensive reform by a date certain. Release of the NBP has already been delayed once since the Commission published the FNPRM.[41] Full implementation of the final NBP will almost certainly take years and will likely involve numerous notices and comment periods. This indefinite delay completely ignores the 2005 instruction from the Tenth Circuit to act "in an expeditious manner, bearing in mind the consequences inherent in further delay."[42] Though NBP elements may impact the high-cost mechanism later, the Commission must comply with *Qwest II* now. Further delay on issues that can be resolved now is unwarranted and will continue to harm non-rural carriers and their customers.

The Rural States would be more understanding if this were the first time the Commission had sought and promised comprehensive reform. Sadly, it is only the most recent in a series of similar delays imposed by several generations of FCC Commissioners, each of which expressed a plan to make comprehensive reforms.

- In 1997, the Commission said that it could not act on non-rural support because it was working on a new cost model and had not yet achieved dependable cost information.[43] The Commission did eventually implement a new support system

[41] *See* Letter from Julius Genachowski, Chairman, FCC, to Sen. John D. Rockefeller, Chairman, Senate Committee on Commerce, Science, and Transportation (January 7, 2010).

[42] *Qwest II* at 1239.

[43] *Federal-State Joint Board On Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd. 8776 (First Report and Order) at ¶¶ 244, 245 ("Despite significant and sustained (*Footnote Continued)*

for non-rural carriers based on a forward-looking cost model. That new system took effect on January 1, 2000, almost four years after the enactment of the Telecommunications Act of 1996. That new support system has been the subject of both the *Qwest I* and *Qwest II* remands and has still not demonstrably complied with that Act.

- In 2001, the Commission promised to develop over the next few years "a long-term universal service plan for rural carriers that is better coordinated with the non-rural mechanism."[44] That plan was never developed.

- In 2003, in response to the *Qwest I* decision, the Commission said that it "must and will initiate a proceeding to address . . . how to ensure that the intrastate support mechanisms for rural and non-rural carriers function efficiently and in a coordinated fashion."[45] No such proceeding to coordinate the rural and non-rural mechanisms was ever initiated.

- In 2008, the Commission issued several Notices of Proposed Rulemaking asking for comment about comprehensive reform.[46] One proposal made at that time was to use reverse auctions. The Commission never issued a decision as a result of that round of comprehensive reform.

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efforts by the commenters and the Commission, the versions of the models that we have reviewed to date have not provided dependable cost information to calculate the cost of providing service across the country").

[44] *Federal-State Joint Board On Universal Service*, CC Docket No. 96-45, Fourteenth Report and Order, FCC 01-157, 16 FCC Rcd. 11,244 ("*Rural Task Force OrderI"*) at ¶ 8.

[45] *Qwest I Remand Order* at ¶ 107.

[46] *High-Cost Universal Service Support*, WC Docket No. 05-337, Notice of Proposed Rulemaking, FCC 08-22 (released Jan. 29, 2008).

As for the NPRM's second basis for inaction, it is even more discouraging to read the Commission's signal that it views financial relief to non-rural carriers as a step in the wrong direction. The Commission announces that it is "reluctant at this time to propose adopting any changes to the non-rural support mechanism that would increase significantly the amount of support non-rural carriers would receive,"[47] and that any changes to the support mechanism:

> should be interim in nature and should not increase the overall amount of non-rural high cost support significantly above current levels, provided that goal can be accomplished *consistent with our mandate under section 254*.[48]

These observations are telling. Whether the existing system complies with Section 254 is formally the issue, but the real decision is that the Commission has simply decided to "say no" to rural areas served by larger companies. The Commission seems once again to be engaging in a result-oriented process similar to those rejected in *Qwest I* and *Qwest II*. In the italicized text quoted above, the Commission acknowledges that it cannot focus on the size of the Fund at the expense of compliance with Section 254. However, it is headed straight in that direction.

The Commission also asserts that any additional support provided as a result of this proceeding would make it "more difficult to transition that support to focus on areas unserved or underserved by broadband, if called for in future proceedings."[49] The Commission offers no basis for this conclusion. Since incumbent carriers are likely to use many of the same facilities to deliver broadband that they now use to deliver voice service, solving the current problems would likely make the transition to broadband support easier, not harder. Insufficient funding for narrowband voice networks is unlikely to be sufficient for broadband networks.

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[47] FNPRM at ¶ 13.

[48] *Id*. (emphasis added).

[49] *Id*.

In offering this justification, the Commission creates the impression that it has already predetermined that comprehensive reform will move in some direction other than where *Qwest II* is moving. It appears that the Commission does not want to increase support to non-rural carriers under *Qwest II* because it anticipates later reducing support pursuant to comprehensive reform. The Rural States hope that the Commission's statements do not signal that it has prejudged the amount of support that non-rural carriers will need following comprehensive reform.

The FNPRM offers a second reason to leave the benchmark unaltered, that customers should not be burdened by universal service charges. The FNPRM says that any "substantial increases in non-rural high cost support disbursements, moreover, would increase the contribution factor above its current high level."[50] While true, this statement suggests that the High Cost Model program is already, or is likely to be, a major component of the total universal service contribution factor. That is not accurate.

USAC has projected that it will pay a total of $29.96 million in Model Based Support Program in January of 2010.[51] Of this amount, only 44%, or $13.16 million will be paid to incumbents.[52] The Commission's Office of Managing Director estimates that the Commission's universal service programs require $702 million per month in the first quarter of 2010.[53] Therefore, the High Cost Model Support currently paid to incumbent carriers amounts to 1.9% of the total fund.

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[50] *Id.*

[51] *See* USAC Appendix HC01A for 1Q2010 (figure based on authors' calculations).

[52] *Id.*

[53] *See* FCC, Office of Managing Director, Public Notice DA 09-2588, issued December 11, 2009 at 2 (Quarterly program collection to be $2,106.54 million.)

No option currently under consideration in this proceeding seems likely to produce a significant increase in the contribution rate. On the contrary, rate variations that have recently occurred due to routine accounting and administrative changes have been larger than anything that is likely to be generated here.

The Commission's observation about Fund size raises still another concern. The FNPRM summarizes previous decisions in which the courts have noted that "excess subsidization" could impair comparability and affordability.[54] The FNPRM seems to suggest that the Commission views support to non-rural carriers, on its face, as an unwarranted burden on contributors. While *excess* subsidization would indeed be a problem, the Commission has begged the fundamental question, whether more support to non-rural carriers would be excessive. The FNPRM seems to suggest that *any* increase in support to non-rural carriers, even if necessary to satisfy the sufficiency standard, would be excessive and unreasonably burdensome to contributors.

Sufficient support to high-cost areas served by non-rural ILECs is an essential part of the Commission's duty under Section 254, as much so as support to areas served by rural carriers. It is arguably even more central than Interstate Access Support and Interstate Common Line Support. Both of those much larger programs were created in 2000 and 2001 to reduce interstate access charges, a matter that has no proximate effect on local rates.

C. The Commission has not proposed any way to tie together its cost-based support mechanism and its statutory duty to keep rates reasonably comparable.

In the "Funding Mechanism" part of the *Qwest II* decision, the Court said that it had expected to see, but had not seen, "empirical findings" showing that the Commission's cost-

[54] FNPRM at ¶ 13.

based funding mechanism did indeed produce reasonably comparable rates.[55] Even if the Commission cannot demonstrate that its support is *actually causing* rates to become reasonably comparable, at a minimum the Commission must explain how its support program *reasonably expects to achieve* the statutory result of preserving and advancing universal service by making rural rates reasonably comparable to those in urban areas.

The FNPRM tentatively concludes that support should continue to be based "on estimated forward-looking economic cost rather than on retail rates, primarily because costs necessarily are a major factor affecting retail rates."[56] While the Rural States agree that costs are a better method for distributing support than rates, a mere distribution mechanism is not sufficient, in itself, to tie the Commission's actions to its statutory goals. It is not adequate for the Commission to essentially say, "We're distributing some money, and here's how we do it." A given support mechanism might have no effect on the statutory goals, or might even harm the statutory goals. Or, the mechanism itself might be well designed, but the funding level may be insufficient.

The FNPRM not only fails to provide the empirical findings sought by the Court, but it fails to even explain how its support *might* cause rural rates to become reasonably comparable to urban. In short, the Commission has never developed a way to explain to the Court, or to the public, what its financial support is intended to achieve.

One way to solve this problem would be to develop a standard "business model" for ILECs that generally relates forward-looking economic cost, operating revenues, and federal support to local rates. The Maine Public Utilities Commission ("MPUC") has repeatedly asked

[55] *Qwest II* at 1237.

[56] FNPRM at ¶ 21.

the Commission to perform this work. Most recently, the MPUC advocated that the Commission adopt an "Adjusted Model-Based Cost" concept.[57] Previously, the MPUC supported using a "Net Subscriber Cost" concept.[58] In both cases the key missing ingredient is an estimate of the revenues that an incumbent carrier can expect from other sources (*e.g.*, interexchange net revenue, special access revenue, private line revenue).

The FNPRM does not even discuss the issue of incumbent carrier revenue from other sources, much less how that revenue influences the carrier's need for support and its rates. Without such a discussion, it is difficult to see how the FNPRM can lead to a final order that contains the "empirical findings" demanded in *Qwest II* . The absence of clear discussion on this topic has frequently complicated past judicial reviews, leading the parties (and the court) to confound facts about rates with facts about the costs upon which support is predicated. The Commission cannot realistically expect a reviewing court to perform a deferential and competent review when it has failed to explain on the record how it believes its program accomplishes its statutory goals.

The Rural States suggest below how this problem could be solved over the next year. For present purposes, the point is that the Commission has not yet developed such a model. Therefore the Commission has no basis to adjust support in areas that do have or might reasonably be expected to have higher rates. Instead, the Commission must now decide on

[57] *See In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service*, WC Docket No. 05-337, CC Docket No. 96-45, Comments of Maine Public Utilities Commission and Vermont Public Service Board (May 8, 2009) at 12, n.22.

[58] *See In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service*, WC Docket No. 05-337, CC Docket No. 96-45, Comments of the Vermont Public Service Board, the Vermont Department of Public Service, and the Maine Public Utilities Commission (March 27, 2006) at 27.

substantive relief for the Rural States without benefit of such a model. This limits the Commission's range of rational options for immediate relief.

D. The current cost benchmark has never been related to the statute and has design flaws that overlook the increased need for support.

The "cost benchmark" is the cost level at which a carrier's costs (or in this case the state's average cost among non-rural carriers) are high enough to generate support. This benchmark has several serious problems that the Commission has never addressed, notwithstanding two remands from the Tenth Circuit. The Commission should explain in detail how its cost benchmark meets the statutory requirement.

First, the Commission has never explained why costs at exactly 2.00 standard deviations should generate support. This currently maps to a cost of $28.13 per line per month. The Commission has never explained why support that covers 76% of a non-rural carrier's cost above this benchmark would be sufficient to allow that carrier to achieve reasonable rates.

By using the statistical concept of standard deviation as the unit for defining the cost benchmark, the Commission suggests that the support mechanism has a scientific basis. There is no such basis. In statistics, standard deviation tests can be used to determine when two samples are dissimilar. For example, a scientist might use the two standard deviations test to determine whether people who take a certain drug live longer. Because science is fundamentally conservative, it avoids conclusions that are not based on overwhelming evidence. Just as criminal courts require evidence of guilt beyond a reasonable doubt, science often requires proof of a proposition to a high confidence interval, such as 90% or 95%.

The policy task here is quite different. If the comparability problem were to be stated as an evidentiary rule, the correct answer would be the preponderance of evidence test. If the

Commission has convincing evidence that rates in a rural area are not reasonably comparable to urban rates, the Commission has a duty to investigate and possibly to revise its support mechanism. It is not a proper response to raise the standard of proof.

There is no scientific or policy reason to believe that 2.00 standard deviations is a better or more precise figure than 1.5 standard deviations, or 1.0 for that matter. In other contexts the Commission has made other choices. For example, the Commission has evaluated physical collocation prices by comparing the carrier's direct cost against a standard set one standard deviation above the industry-wide average.[59] The Commission has not explained why it is appropriate here to select a standard that makes it so difficult to show that rural conditions are "reasonably comparable" to urban conditions.

The current cost benchmark has still another flaw. The standard deviation calculation is made from cost data that have first been aggregated at the state level. The Commission has not explained why this procedure is the better choice.[60] The statute does not ask the Commission to ensure that rates in Montana are comparable to rates in Massachusetts. Rather, it asks the Commission to ensure that rates in each rural area are comparable to a single number, the average rates in urban areas around the country. It is not clear why a list that describes the

[59] *Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport,* CC Docket No. 93-162, FCC 97-208, Second Report and Order (released June 13, 1997) at ¶ 124.

[60] If the two standard deviation rule is used on wire center data, a much higher benchmark results. The following calculations are based on the Commission's initial model run that was used for 2000 support and that is currently available on the Commission's website. Subsequent model runs were not published.

	Wire Center Calculation	**State Level Calculation**
Average of cases	$52.29	$25.62
Standard deviation	$62.64	$4.89
Benchmark	$177.58	$35.40

standard deviation among the 50 states is even relevant to the problem. Even assuming that the Commission can somehow explain why it should use "standard deviations" at all as a unit of measure, it then needs to explain why that measure should be calculated using data that are aggregated at the state level.

As the Rural States noted above, the rate-based comparability mechanism is self-forgiving.[61] The cost-based support mechanism, set two standard deviations above average cost is also self-forgiving. To illustrate, suppose a high-cost state like Montana were to experience line losses and a resulting increase in average cost. The Montana change would increase both the national average cost and the standard deviation. The current rate benchmark would therefore increase, and support would be reduced to Montana and the nine other states that currently receive support. Yet a hypothetical cost increase in Montana has little or nothing to do with urban costs, since Montana contains no sizeable urban populations. In sum, when conditions worsen and high-cost states become higher-cost states, the mechanism adjusts by adopting a new and more liberal benchmark and re-characterizes the higher costs as "reasonably comparable." A mechanism that preserves and advances universal service would not take such an illogical step.

In sum, the current benchmark of two standard deviations is no more precise or scientific than was the 135% benchmark that was remanded in *Qwest I*. Without a justification based in statistical theory, the use of two standard deviations is all form and no substance. Even if such a method were permissible, it is a mystery why the standard deviation should be based on data aggregated at the state level. Moreover, the standard is self-forgiving and is likely to ignore increased needs for support among high-cost carriers.

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[61] *See* section II.D, *supra*.

E. The current cost benchmark cannot satisfy the statute because it is not tied to *urban* costs.

The final and most basic problem with the cost benchmark is that it has no direct relationship to conditions in urban areas. While the Commission continues to support using a cost-based support mechanism, it has never tied its benchmark to the costs that prevail in urban areas.

Instead, the cost benchmark is expressed as a function of the national average cost among *all* non-rural carriers. That universe, however, includes both high-cost rural areas and low-cost urban areas. Therefore the relationship between the current cost benchmark and the average cost in urban areas is unknown. If a cost-based mechanism is the best means to manage the relationship between rural rates and urban rates, the Commission cannot satisfy the statute without first explaining how that cost-based mechanism relates to costs in urban areas.

The contrast to the comparability benchmark is striking. When measuring the *results* on consumers, the Commission's rate-based reporting methodology uses a benchmark that is two standard deviations above the average *urban* rate. When setting the *cost* benchmark to calculate support, however, the Commission chooses a higher beginning point, the average cost in both urban and rural areas. This problem is easily avoided, as the Rural States have previously suggested several ways in which the Commission can calculate urban costs.[62]

In sum, the Commission has failed to justify how its cost complies with law. It has not given any rationale to explain why a benchmark of two standard deviations is an appropriate choice for reasonable comparability or why standard deviation should be calculated from

[62] The Maine PUC and the Vermont PSB previously offered alternative methods of estimating urban cost. These included calculating the average cost of wire centers that are predominantly located in urbanized areas. The Commission has not pursued those suggestions.

aggregated data. It has not explained the relationship between its benchmark and conditions in urban areas. In short, the Commission still has not given the public or a reviewing court any basis to find that it has an informed and expert choice from among a range of reasonable options.

F. Reduced line counts and selective uses for old and new line count data make support insufficient.

Even if the Commission's support was arguably sufficient at one time, subsequent changes in the cost environment have made it insufficient. The cost and profitability of running a telephone company has changed dramatically during the last decade. The most significant factors have been line losses and increased labor and materials costs. The Commission's cost models have not kept up with these trends.

Line loss is the more serious problem. The Commission last used its proxy model to calculate the per-line costs of non-rural carriers in 2004, for support distributed in 2005. [63] The relevant output of the proxy model is the average cost of providing service per line per month. That average cost per line is used by the Commission's support mechanism to produce a support amount per line. For example, the 2004 model run calculated an average cost for Maine of $28.42 per line per month. The support mechanism translated this into support of $0.22 per line per month in 2005. In each subsequent year, Maine's non-rural incumbent has continued to receive $0.22 per line per month.

Since 2004, most states have lost a large share of their ILEC line counts. This is the consequence of competition by other wireline providers, notably cable providers, and secondarily from internal competition through broadband-based voice services and wireless

[63] The line counts used at that time were collected in December 2002.

substitution. The changes for ten states that receive High Cost Model Support are shown in the table.[64]

	ILEC Line Counts used for Support Year		
State	**2004**	**2009**	**% Growth**
AL	1,775,012	1,433,958	-19.2%
KY	1,132,217	806,360	-28.8%
ME	680,401	464,742	-31.7%
MS	1,213,938	964,513	-20.5%
MT	357,061	255,406	-28.5%
NE	401,285	242,533	-39.6%
SD	213,632	128,430	-39.9%
VT	342,765	273,599	-20.2%
WV	815,452	621,912	-23.7%
WY	229,859	176,063	-23.4%
Supported States	7,161,622	5,367,516	-25.1%
Non-Supported States	132,310,328	99,633,854	-24.7%
All States	139,471,950	105,001,370	-24.7%

By 2009, the line counts for these states had decreased an average of 25% from 2004. In other words for every four incumbent non-rural lines that existed in 2004, only three still existed in 2009. Nebraska and South Dakota were the extreme cases, having lost 40%.

In an ideal world, the Commission would have been running the model annually, and the model would have picked up the reductions in switched line counts. Because most of the cost of running a telephone company is fixed, the model would then have reported that state average

[64] FCC, *Selected RBOC Local Telephone Data,* (*available at* http://www.fcc.gov/wcb/iatd/comp.html). Line counts used in for support year 2004 were derived from December 2002 subscribership data. Similarly, support year 2009 would have used subscribership data from December, 2007. The above table uses line counts only for RBOC carriers. The line counts are only available for regional Bell operating companies ("RBOCs"). The Rural States were not able to obtain consistent ILEC line count data for the non-RBOC non-rural carriers.

costs per line per month were higher than in previous years. That in turn should have led to an increase in support.[65]

Two Commission policies have prevented support from increasing. First, the Commission was not running the model annually. Therefore the support mechanism could not learn that average costs had increased and that more support was needed.

The second problem is even more egregious. Although the Commission has not run the cost model for five years, it annually uses current line counts to adjust support using its "targeting" procedure, a calculation that occurs after a total state support amount is determined. When an ILEC loses lines, the targeting procedure reduces its support in proportion. By mixing old and new line count data in this way, the Commission not only sidesteps the need to recognize the higher average costs and reduced revenues that flow from line losses, but it actually reduces support at the very time when it should be increasing.

In sum, the non-rural incumbents in the states currently receiving support have all experienced substantial line losses during the last few years. Under these circumstances, a sufficient support mechanism would increase support to non-rural incumbent carriers to reflect the increased average unit cost in high-cost rural areas. Instead, the Commission's targeting mechanism has reduced that support. Such a mechanism is guaranteed to deliver insufficient support to non-rural incumbent carriers.

[65] The cost changes in high-cost rural states like those listed would likely have been greater than average. When average cost is plotted against customer density, the highest costs occur in the least dense exchanges. In other words, the cost curve is steepest when density is low. Therefore, if a rural and urban area each experience a 10% line loss, the dollar change in per-line costs in the rural area will be greater than in the urban area. This effect would normally increase the dissimilarity of costs between urban and rural areas, and it would increase the need for support to the rural areas if rates are to stay reasonably comparable.

The Commission professes support for using a cost-based support mechanism that relies on a cost model. It should allocate sufficient resources within the agency to at least periodically recalculate the costs that underlie its support mechanism as conditions change.

G. Immediately, the Commission should rerun the cost model with current switched line counts and lower the benchmark to 125% of urban cost.

The Commission cannot overlook these flaws in the mechanism for calculating universal service support. Immediate relief is needed because sufficient support is more important than ever. Comprehensive reform is unlikely in the near term, has no end date, and in any case it provides no justification for further delay. The Commission still has no model that can tie its support mechanism to its statutory goals. The current mechanism relies on a benchmark that has no mathematical justification. Finally, carriers serving rural areas are being harmed by selective use of line counts and the failure to consider increased materials costs.

Unfortunately, the FNPRM does not contain any proposals that could adequately address these problems. Therefore, the Rural States reiterate their previous recommendations as offering the only justifiable solutions. The Commission should take three actions on April 16, 2010, each of which should apply for the first time to support distributed in the third quarter of 2010:

1. The Commission should re-run the cost model to determine updated cost using current switched line counts as inputs. The new cost model results should then be used as inputs to the support mechanism.

2. The Commission should modify its support mechanism to establish the national cost benchmark at 125% of urban cost. [66]

[66] The Rural States have provided justification for a benchmark no greater than 125% in prior comments. *See, e.g.* Comments of The Vermont Public Service Board, The Vermont (*Footnote Continued)*

3. The Commission should modify its support mechanism to define "urban cost" as equal to the average cost reported for Washington, D.C. Until some better methodology is adopted, the cost in the District is the simplest surrogate for national urban average costs.

IV. Phase II: During the remainder of 2010, the Commission should take additional steps to strengthen its support mechanism for non-rural carriers

The Commission should not overlook needed changes to its non-rural support mechanism while it pursues the larger aim of completely reforming universal service. As reported above, several generations of FCC Commissioners have committed themselves to comprehensive universal service reform, all without achieving it. Modest improvements have too long been deferred in the service of grand solutions. The Commission should instead commit itself to complete a list of tasks by the end of 2010 that can materially improve the functioning of the non-rural support mechanism, whether or not comprehensive reform is enacted later.

A. The Commission should update several data inputs and run its cost model again with that data.

The FNPRM recites several problems with the current cost model. Many of these problems are deeply seated. Solving them will require collecting major new data sets and performing a fundamental redesign of the cost model to accommodate current technologies and

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Department of Public Service, and The Maine Public Utilities Commission, CC Docket No. 96-45, WC Docket No. 05-337, March 27, 2006. To summarize those comments, the Court rejected the Commission's prior comparability standard (equivalent to 135% - 138% of nationwide average rates) because it did not narrow existing rate differences. Narrowing the gap requires a much more aggressive standard. 115% of nationwide average cost has historically been used as the threshold for support for the loop costs of rural carriers. Both 115% and 125% would produce rates that are reasonably comparable, in a practical sense, while not exactly comparable. By setting the benchmark no higher than 125%, the Commission will narrow and abate existing gaps in rural and urban rates (costs).

expectations. When the Commission last undertook this task, several years were consumed and several notice and comment periods were required. We suggest below a series of steps that can and should be taken to reform the Commission's support mechanism. Each of these suggestions is explained in Attachment A, and each can easily be completed in 2010 in time to control the 2011 support distribution.

1. Special access line counts should be updated.

The Commission should update the special access line counts that are used in the cost model to calculate costs. The Commission last collected data on the actual location (by wire center) of special access circuits in approximately 1999. From 1999 until 2004, the Commission incorporated current special access counts into its model runs, even though it didn't really know where those special access circuits were located. Instead, the Commission used an estimation technique that "allocated" new special access circuits geographically in proportion to their utilization in 1999. This methodology was not accurate because new special access circuits during this period did not generally get purchased in places where they had previously existed. The effect was to overstate the number of special access circuits in rural areas and spuriously to decrease the apparent cost differences between urban and rural areas. It was as though rural exchanges suddenly had a virtual large employer. The net result was that support decreased based on incomplete collections of new data.

The Commission should require incumbent non-rural carriers to submit special access line counts, by wire center, and it should use that data to recalculate forward-looking costs in each wire center.

2. Switched and special access customers should be geocoded.

When the Commission ran the cost model from 1999 through 2004, it assigned customer locations using an estimation method that assumed customers were equally spaced along roadways. The technology has improved since then. Most proxy models today have much more accurate ways to locate customers. Actual customer locations are "geocoded" by latitude and longitude with high reliability. This allows the proxy model to increase its accuracy significantly. The Commission should adopt the newer methods.

B. The Commission should develop an ILEC business model that ties together its cost-based support mechanism and its statutory duty to keep rates reasonably comparable.

As discussed above, the Commission still has provided no theory or model that explains how the existing non-rural support mechanism, which is based on cost, ties in to the statutory objectives in section 254, which refer to rates. The absence of such a model prevents the Commission from developing the "empirical findings" sought by *Qwest II*. The Commission must articulate a theory, however crude, about how its support can reasonably be expected to produce a distribution of rates that preserves and advances universal service. The Commission should make it a priority to develop such a model. Such a model will be particularly useful if the Commission seeks to comprehensively reform existing high-cost programs and to begin offering support for broadband-capable networks.

One way to solve this problem is to develop a standard "business model" for ILECs that generally relates forward-looking economic cost, operating revenues, and federal support to local rates. The Commission should then show that the design of its current support mechanism, when fed into that business model, produces local rates in rural areas that are reasonably comparable to the rates in urban areas.

Appendix B is a spreadsheet that illustrates how an ILEC business model might work. The purpose is to provide a logical basis for reaching a conclusion about whether support is sufficient. The model shows how costs, revenues, and support interact to affect local rates. Because of the Commission's current interest in broadband, the model differentiates between areas in which broadband is available and areas where it is not available. The model can consider carrier-specific data regarding: broadband availability, costs for broadband and narrowband lines, and subscription rates. The model is currently based on simplified assumptions,[67] but it can be refined by seeking comment on some parameters such as average revenue per unit. The output is found on the last two tabs. The penultimate lists the expected local rates of each carrier. The final sheet analyzes the dispersion of that rate distribution, calculating such variables as the ratio of the highest rate to the mean rate.

C. The Commission should adopt a methodology to ensure that service levels in rural areas are comparable to urban areas.

The Rural States discussed above the fact that Section 254 requires comparability of both rates and services. The Commission has a duty to preserve and advance both universal service standards. As the FNPRM notes, that duty is not limited merely to voice services but also includes advanced services and interexchange services.[68] During 2010, the Commission should take four steps regarding service quality and availability:

[67] The model currently estimates several national average parameters that should be adjusted after notice and comment. These include average revenue per unit and average take rates for various kinds of bundles. Due to lack of currently available data, the spreadsheet also assumes that some carrier-specific variables (such as broadband buildout) are uniform across all carriers. The model assumes that state high cost funds are not material contributors of funding.

[68] FNPRM at ¶ 18.

1. The Commission should determine the prevailing level of service (*e.g.*: availability of facilities) and service quality indices (*e.g.*: average service restoration times) in urban areas. The task will require detailed inventories of service availability by location, a task that is similar to what states recently have done with broadband maps. It will also require the Commission to establish some essential service quality metrics that will be monitored regularly.

2. The Commission should measure the level and quality of service available in each rural study area (including rural areas served by so-called "non-rural" carriers).

3. The Commission should evaluate whether the level and quality of service are reasonably comparable to service in urban areas.

4. If the Commission finds that the level and quality of service in a rural area is not reasonably comparable to the prevailing levels in urban areas, the Commission must develop an action plan. That plan may include providing greater financial support to areas with substandard facilities or service quality.

If the Commission retains an annual certification of compliance under 47 C.F.R. § 54.316, it should modify that certification to include data regarding the level and standards of service. Reporting should include several factors, at a minimum:

1. Net investment per line.

2. Percentage of served locations with DSL availability at speeds equal to or exceeding a predefined minimum.

3. Number of customer service representatives per 1,000 customers.

4. Average wait times to reach a customer service representative.

5. Frequency of trouble reports.

6. Average service restoration time.

V. Phase II: After 2010 the Commission should continue to improve the support mechanism.

A. The Commission should continue improving the cost model.

After 2010, the Commission should continue to work on improving the cost model and the support mechanism for non-rural carriers. There seems to be general agreement, including by the Commission itself, that the existing model is unreliable and inadequate. Some commenters have criticized elements of the model or the underlying data. Others are skeptical of the results, particularly the results that allocate a great deal of support to a few states that inexplicably also have low rates and low plant investment.

Fixing the model therefore should be a priority project, even if the Commission knows that it will take several years, and regardless of whether the Commission includes broadband as a supported service under Section 254. At a minimum, the Commission should take at least two actions to improve the model to solve known deficiencies with any solutions that are readily at hand.

First, the Commission should modify its current "feeder and distribution" module within the proxy model. Currently the model designs a virtual network using a "minimum spanning tree" methodology. Since the Commission adopted the model in 1999, modeling technology and data sources have improved. It is now possible to recognize real world construction constraints that are imposed by geographic features such as bodies of water, mountains, railroad rights-of-way, and, most particularly, road locations. The Commission should modify the feeder and distribution model so that it is constrained by these geographic features.

Second, the Commission should review and modify, if necessary, the routines in the cost model regarding special access. A telephone exchange with many special access circuits has economies of scale and sources of revenue that are not available in an exchange that offers mainly switched services. It is commonplace to observe that exchanges with more switched lines have lower per-line costs. The same holds true of special access services, which are today (and much more so than in 1999) a major revenue component for larger incumbent carriers.

The cost routines in the current model regarding special access are primitive. For example, DS-3 circuits are presumed to require the same facilities as 28 DS-1 circuits. This is an inaccurate assumption and one that is likely to distort urban costs. The Commission should undertake a thorough redesign of how unswitched services, including special access, affect costs and revenues.

B. The Commission should ensure that universal service mechanisms do not eliminate the incentive for investment.

As we noted above, the Commission's twin policies of using price caps to set interstate rates and using forward-looking economic cost to calculate support eliminate carrier incentives to invest in network facilities and to maintain sufficient support staff. The Commission should address this problem in any new support mechanism. A support mechanism should not allow carriers to improve their profits by allowing their networks to languish and become obsolete and unreliable or by cutting service positions to the point that service quality suffers.

The Commission should:

1. Ensure that its cost model is capable of estimating the costs of providing a network that includes advanced services, including high capacity unswitched services and broadband Internet services.

2. Develop a way to estimate the revenues available on broadband-capable and other high capacity lines.

3. Require supported carriers to report annually on the percentage of their switched access lines that are capable of providing good quality broadband service.

4. Test the support mechanism to ensure that it does not inadvertently create an incentive to disinvest.

Conclusion

For these reasons, the Rural State Commissions respectfully request that the Commission follow the steps described above to issue an order that is consistent with the Tenth Circuit's ruling in *Qwest II* and Section 254 of the Act.

Respectfully submitted this 28th day of January, 2010.

/s/ Joel Shifman
Joel Shifman
Senior Advisor
Maine Public Utilities Commission
242 State Street
Augusta, Maine 04333-0018
(207) 287-1381

/s/ William C. Black
William C. Black
Wayne R. Jortner
Maine Public Advocate
112 State House Station
Augusta, ME 04333-0112
(207) 287-2445

/s/ George Young
George Young, Esq.
Policy Director
Vermont Public Service Board
112 State Street
Montpelier, Vermont 05602
(802) 229-0130

/s/ Justin Kraske
Justin Kraske
Attorney
Montana Public Service Commission
1701 Prospect Avenue. PO Box 202601
Helena, Montana 59620-2601
(406) 444-6178

/s/ Patrick W. Pearlman
Patrick W. Pearlman
Deputy Consumer Advocate
Consumer Advocate Division of
the West Virginia Public Service Commission
700 Union Building, 723 Kanawha Boulevard, East
Charleston, WV 25301
(304) 558-0526

Appendix A – Declaration of Dr. Robert Loube

Appendix B – Sample ILEC Business Model

(Excel spreadsheet is voluminous and has been electronically filed)